

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Numbering Policies for Modern Communications	)	WC Docket No. 13-97
	)	
IP-Enabled Services	)	WC Docket No. 04-36
	)	
Telephone Number Requirements for IP-Enabled Services Providers	)	WC Docket No. 07-243
	)	
Telephone Number Portability	)	CC Docket No. 95-116
	)	
Developing a Unified Intercarrier Compensation Regime	)	CC Docket No. 01-92
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
Numbering Resource Optimization	)	CC Docket No. 99-200
	)	
Petition of Vonage Holdings Corp. for Limited Waiver of Section 52.15(g)(2)(i)	)	

**COMMENTS OF BANDWIDTH.COM, INC.**

James C. Falvey, Esq.  
Justin L. Faulb, Esq.  
Eckert Seamans Cherin & Mellott, LLC  
1717 Pennsylvania Avenue, N.W.  
12<sup>th</sup> Floor  
Washington, D.C. 20006  
(202) 659-6655  
jfalvey@eckertseamans.com  
*Counsel for Bandwidth.com, Inc.*

Greg Rogers, Esq.  
Deputy General Counsel  
Bandwidth.com, Inc.  
900 Main Campus Drive  
Raleigh, NC 27606  
(919) 439-5399  
grogers@bandwidth.com

July 19, 2013

## **Table of Contents**

I.	Summary .....	2
II.	Without Accompanying Holistic Reform, Providing Non-Carriers Direct Access to Number Resources Will Create More Problems Than It Will Solve .....	4
A.	The Commission Should Identify Discrete Issues and Resolve Them Through Direct Solutions, Rather Than By Direct Access to Number Resources for Non-Carriers .....	4
1.	The Commission Should Separate the Wheat from the Chaff by Identifying Numbering Issues that Merit Its Immediate Attention .....	5
2.	A Review of the Issues Identified Reveals that Most Should Not Be Addressed Through Changes to Numbering Policies .....	7
B.	The Commission Should Work Toward Direct Solutions Where Possible But Must Avoid Adopting Fundamentally Discriminatory Positions that Favor Non-Carriers and Will Have Both Expected and Unintended Adverse Consequences .....	11
III.	If the Commission Permits Non-Carriers to Have Direct Access to Number Resources, It Should Proceed Cautiously .....	14
A.	State and Federal Certification .....	15
B.	Number Utilization and Exhaust Issues .....	16
C.	VoIP Interconnection .....	17
D.	Facilities Readiness .....	18
E.	Intercarrier Compensation .....	18
F.	Number Portability .....	20
IV.	If the Commission Permits Non-Carriers Direct Access to Numbers, It Should Provide A Meaningful Transition .....	20
V.	Conclusion .....	21

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Numbering Policies for Modern Communications	)	WC Docket No. 13-97
	)	
IP-Enabled Services	)	WC Docket No. 04-36
	)	
Telephone Number Requirements for IP-Enabled Services Providers	)	WC Docket No. 07-243
	)	
Telephone Number Portability	)	CC Docket No. 95-116
	)	
Developing a Unified Intercarrier Compensation Regime	)	CC Docket No. 01-92
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
Numbering Resource Optimization	)	CC Docket No. 99-200
	)	
Petition of Vonage Holdings Corp. for Limited Waiver of Section 52.15(g)(2)(i)	)	

**COMMENTS OF BANDWIDTH.COM, INC.**

Bandwidth.com, Inc. (“Bandwidth”), files these comments in response to the Commission’s request for comment in the Notice of Proposed Rulemaking, Order and Notice of Inquiry, released on April 18, 2013 (“NPRM”), on a wide a variety of complex and interrelated issues concerning the prospect of allowing non-carrier providers to have direct access to North American Number Plan (“NANP”) number resources on a wide scale for the first time. While it is clear that the communications industry is undergoing a paradigm shift toward Internet Protocol (“IP”) technologies and away from the public switched telephone network (“PSTN”), trying to implement a discrete, but extremely thorny, concept that is fundamentally driven by a handful of non-carriers aiming to achieve a discriminatory leg up on the competition is likely to create more

problems than it will solve. Therefore, Bandwidth urges the Commission to focus its resources and those of the industry collectively on the holistic reform that is necessary to enable a rapid but smooth transition to a regulatory structure premised upon advancing the public interest through IP technologies in a nondiscriminatory fashion.

## **I. SUMMARY**

Bandwidth shares the concerns of many segments of the industry that providing direct access to number resources to non-carrier providers is not a panacea and may in fact create unnecessary new issues and complexity for the industry instead. Numbering is inherently connected to a myriad of related regulatory and policy considerations and must not be approached as if it exists in a vacuum. The industry's transition to networks and markets that are entirely premised upon IP technologies is evolving. Assignment and use of numbering resources is one very important component of that transition but it is not something that lends itself to piecemeal reform on a stand alone basis. Introducing inexperienced providers—without clear, rational, nondiscriminatory, and broadly understood standards and directives—into an area of the industry that is at the very core of communications network interoperability threatens to create a multitude of unintended consequences.

The issues that the Commission suggests may be cured by granting direct access to numbering resources to non-carriers can be better resolved through more direct solutions without introducing new complexities into an already complex intercarrier ecosystem. Bandwidth, like other innovative VoIP providers, accepted the current carrier regulatory structure as it entered the market and began to compete for communications users. To completely restructure the current carrier-centric system to accommodate a few providers that have consciously decided to not be carriers in order to avoid carrier-based regulation is a proverbial tail wagging the dog scenario.

As Bandwidth and other parties have demonstrated in this proceeding, permitting non-carriers to obtain direct access to number resources will lead to practical and operational problems, including but not limited to problems with consumer protection, interconnection, intercarrier compensation, and number exhaust. Providing non-carriers direct access to number resources also threatens to remove an important layer of pro-consumer and pro-competition state regulation in the process.

Not surprisingly, direct access has not only been opposed by industry participants, including CLECs, cable companies, and rural carriers,<sup>1</sup> but also by NARUC and virtually every major consumer group.<sup>2</sup> Bandwidth urges the Commission to identify the rules and public policies that it believes are critically broken and then adopt more straightforward and nondiscriminatory responses to each of those issues. If, however, the Commission continues on a path toward permitting non-carriers to obtain direct access to number resources, in order to resolve the inherent discriminatory nature of the proposal, the Commission should adopt a default rule that non-carriers that seek to obtain numbering resources directly should be required to comply with the same rules that carriers are obligated to follow until such time as holistic reform is firmly established. Otherwise, the Commission will create two parallel regulatory

---

<sup>1</sup> See, e.g., Letter from James C. Falvey, Eckert Seamans, to Marlene H. Dortch, Secretary, Federal Communications Commission, CC Dkt. 99-200 (Oct. 31, 2012); Letter from Steven F. Morris, NCTA, to Marlene H. Dortch, Secretary, Federal Communications Commission, CC Dkt. 99-200 (Jan. 8, 2013); Comments of the National Telecommunications Cooperative Association, CC Dkt. 99-200 (Aug. 23, 2012); Letter from Stephen G. Kraskin, Communications Advisory Council, LLC, counsel to the Rural Broadband Alliance (“RBA”), to Marlene H. Dortch, Secretary, Federal Communications Commission, CC Dkt. 99-200 (July 2, 2012).

<sup>2</sup> See Letter from AARP, Common Cause, Consumer Federation of America, Consumers Union, Free Press, Public Knowledge, National Consumer Law Center, NASUCA, NARUC, to Julius Genachowski, Chairman, Federal Communications Commission, CC Dkt. 99-200 (Apr. 11, 2013). See also NARUC Resolution TC-4 Resolution Concerning Access to Numbering Resources and Adherence to Numbering Rules by Voice over Internet Protocol and IP-Enabled Service Providers, (adopted Feb. 8, 2012) (“NARUC Resolution”).

systems causing industry confusion and a race to the bottom by carriers and non-carriers alike as they all try to keep pace with intense competitive pressures in a rapidly evolving marketplace.

## **II. WITHOUT ACCOMPANYING HOLISTIC REFORM, PROVIDING NON-CARRIERS DIRECT ACCESS TO NUMBER RESOURCES WILL CREATE MORE PROBLEMS THAN IT WILL SOLVE**

The Commission should implement holistic reform that provides nondiscriminatory treatment to all providers, rather than piecemeal reform that benefits a select few. However, if the Commission finds a near-term need to address particular numbering issues, it should first identify those discrete issues and implement targeted solutions to address them.

### **A. The Commission Should Identify Discrete Issues and Resolve Them through Direct Solutions, Rather Than By Providing Direct Access to Number Resources for Non-Carriers**

Although the Commission has permitted limited trials of direct number assignment to non-carriers, it did so with recognition that there are significant operational and regulatory hurdles to be overcome if it continues down this path.<sup>3</sup> This NPRM represents a critical crossroads where stakeholders are confronted with the choice of retaining the carrier-based operational and regulatory structure that has worked relatively smoothly for decades or adopting a new and relatively unknown model. The NPRM represents a series of complex regulatory modifications and related questions that are very similar to fundamental questions posed in the PSTN-IP transition context as well as the intercarrier compensation reform context. The long series of questions clearly demonstrates the complexity of the issues, but in many respects a large number of them could be more readily resolved if the Commission returns to first principles by: 1) identifying the specific problems that actually need to be addressed; and 2) creating specific

---

<sup>3</sup> See *Numbering Policies for Modern Communications*, Notice of Proposed Rulemaking, Order, and Notice of Inquiry, 28 FCC Rcd. 5842, ¶¶ 16-65 (2013) (discussing the issues that must be solved surrounding potential direct access to numbering) (“NPRM”).

solutions to those problems. By taking this perspective the Commission could scale back this proceeding significantly, and dedicate its resources to more critically pressing issues—such as the broader PSTN-IP transition, special access reform, and spectrum auctions, to name a few.

**1. The Commission Should Separate the Wheat from the Chaff by Identifying Numbering Issues that Merit Immediate Attention**

The Commission, in the NPRM, invited parties “to address other ways the Commission’s number policies can be utilized” to address outstanding numbering issues and achieve certain supposed benefits of direct access, many of which were identified by Vonage.<sup>4</sup> Bandwidth urges the Commission to streamline its efforts by working to focus on scenarios where there is consensus that there are problems that need to be rectified. One such issue that is referred to repeatedly is an effort to “improve the states’ ability to monitor and manage number utilization.”<sup>5</sup> Because telephone number administration is so fundamental to consumers of communications services of all sorts, meaningful reporting to the state commissions tasked with representing and protecting their consumer constituents’ interests is worth pursuing. Ironically however, the Commission’s solution to this problem, direct access to number resources for non-carriers, is strongly *opposed* by NARUC, as well as several major state commissions, including the California and Pennsylvania PUCs.

Bandwidth recognizes there is uncertainty associated with the issue of “intermediate numbers” and the fact that states have difficulty determining with certainty whether numbers are in fact “in use.”<sup>6</sup> But again, simply granting direct access of numbers to non-carriers will not resolve the issue. The direct response to this issue is to clarify NRUF or other reporting requirements, whether for carriers non-carriers, or for both. The states could then have the

---

<sup>4</sup> NPRM, ¶ 17.

<sup>5</sup> NPRM, ¶ 14. *See also id.*, ¶ 22.

<sup>6</sup> *Id.*, ¶ 23.

information they require, but without the broader, endemic complications of permitting non-carriers direct access to number resources. Other solutions, such as redefining the term “end user” for limited purposes (NPRM, ¶ 23), are likely to sow additional confusion. Questions relating to who is and is not an “end user” implicate many other regulatory issues beyond NRUF reporting and proposing that clarifying an “end user” for number administration purposes alone is not realistic, particularly given the ILEC proclivity to obfuscate and exploit such fine distinctions. Long running intercarrier compensation disputes have turned on the question of who is the legally relevant “end user” of telecommunications<sup>7</sup> and are still tied in fundamental ways to issues such as the geographic association of number resources that is raised in the NOI.

But the Commission should recognize that many of the other issues cited as reasons for providing direct access to number resources will only benefit the small handful of non-carriers that have decided to avoid carrier-based regulation. Revamping the number assignment, as well as number portability, routing, interconnection, and intercarrier compensation rules, to accommodate the small number of companies that have chosen not to become carriers is not common sense regulation and instead represents the tail of a select few non-carriers wagging the dog that is the collective industry as a whole. The Commission must also articulate why its intended benefits to this proposal could not be obtained by non-carriers simply becoming carriers. Although Vonage and other non-carriers have claimed that they somehow are unable to become certificated carriers,<sup>8</sup> Bandwidth and numerous other providers that offer the same or similar interconnected VoIP services have become certificated carriers. There is no evidence in the record of any non-carrier or Interconnected Voice-Over-IP provider (“IVP”) that has sought

---

<sup>7</sup> See, e.g., *Connect America Fund*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd. 17663, ¶ 798 (2011).

<sup>8</sup> Letter from Brita D. Strandberg, Wiltshire Grannis, to Marlene H. Dortch, Secretary, Federal Communications Commission, at 8, CC Dkt. 99-200 (May 7, 2012).



to be certificated as a carrier by a state commission and has been refused state certification.

## **2. A Review of Those Issues Identified Reveals that Most Can Be Addressed Without Changes to Numbering Policies**

The following section is a review of the claimed benefits of granting direct access to non-carriers cited by a select few non-carriers (NPRM, ¶¶ 14, 15), and why the Commission should not extend numbers to non-carriers to achieve any of these benefits, particularly where the same benefits could be achieved if those select few simply became certificated as carriers:

1) Moving to IP interconnection will reduce operational costs by allowing non-carriers to reduce their reliance on wholesale third-party networks (¶ 14): Non-carriers that do not want to rely on wholesale third-party networks can simply become carriers. If they became carriers, these providers would have the same rights to IP interconnection as any other carrier, as well as the right to interconnect on the PSTN. If the true goal of the non-carriers and the Commission is to short-circuit the need to interconnect on the PSTN because it is outdated, then in order to avoid a fundamentally discriminatory competitive landscape the Commission must resolve the PSTN-IP transition issues holistically for the entire industry and not by granting special relief to a select few non-carriers. Providing interconnection rights to non-carriers that are different from carriers and outside the structure of the Telecom Act fundamentally undermines the Telecom Act and the rules that govern the competitive framework of the industry.

2) Carriers refuse to route directly to non-carriers because industry routing databases (NPAC/LENG) do not recognize non-carriers (¶ 14): Industry databases, procedures, and standards that have been developed under the expert oversight of the industry and the Commission over many years exist for a reason and should not be ignored or set aside lightly. The telecommunications industry has always been, and continues to be, fundamentally premised

upon an understanding of who is and who is not a “telecommunications carrier” under the law.

Introducing "non-carriers" into a heavily regulated and standardized realm that has historically been the exclusive purview of regulated carriers is fraught with far-ranging issues.

Interconnection and intercarrier compensation are inherently tied to this established system and are critically important. Further, losing control over the regulatory framework that applies to IP communications services unnecessarily exposes consumers to the abuse and fraud that is bound to proliferate in a non-standardized world.<sup>9</sup> Non-carriers can obtain direct routing by becoming carriers. The routing system revolves around state-certificated carriers and until the Commission revises its fundamental regulatory framework, non-carriers still have a simple choice to make: either have telephone number based traffic routed through carriers, or become a carrier and receive direct routing.<sup>10</sup>

3) Enabling and expediting the deployment of innovative and advanced services (¶¶ 15, 17): Though lack of innovation is one of the most often cited rationales used to support the argument for granting direct access to numbers, the market itself disproves the point. The industry is evolving more rapidly than ever and continuously innovating at greater and greater speeds—including innovation by carriers and non-carriers alike.<sup>11</sup> Further, during a period of unprecedented innovation, carriers have done a very effective job of ensuring that critical consumer protections and network reliability remain intact. Yet, here the proposal to introduce non-carriers into a core function of network interoperability without thoroughly considering the

---

<sup>9</sup> See, e.g., *Rural Call Completion*, Notice of Proposed Rulemaking, 28 FCC Rcd. 1569 (2013).

<sup>10</sup> Also cited are related benefits of direct routing, in terms of improved call quality, fewer handoffs, and simplified troubleshooting. NPRM, ¶ 14. Although non-carriers have not demonstrated these additional benefits in this proceeding through empirical data, these additional benefits could be achieved by becoming a carrier.

<sup>11</sup> See, e.g., <http://middlemarketexecutive.com/a-telecom-disrupter-masters-the-discipline-of-serial-innovation/> (last visited July 19, 2013).

broader implications to consumers and carriers risks a litany of potential unintended consequences that are not in the public interest.<sup>12</sup> There is a highly competitive wholesale communications services market, and innovative providers can shop around to find carriers that will work with them on developing their products responsibly. There is little or no record evidence of specific products that could not be brought to market because of regulatory constraints and, if a provider were to reach that point, it could easily become a carrier and readily achieve that desired control of its own number resources.

4) Non-carriers must purchase additional services in order to obtain number resources (§ 15): This reality is premised upon solid Commission policy that recognizes that numbering resources are a valuable and finite resource that must be managed responsibly by carriers. Further, this is a classic example of where the definition of “telecommunications services” and “carrier” are relevant to number administration rules and industry guidelines that would have to be completely revamped if the Commission continues down this road (not to mention the ramifications for broader industry issues such as interconnection and intercarrier compensation). The Commission-approved industry guidelines dictate that carriers are not to provide number resources without the provision of an accompanying “telecommunications service” or facility to route those numbers through the carrier’s switch.<sup>13</sup>

---

<sup>12</sup> See, e.g., Senate Commerce, Science and Transportation Committee Hearing, *Stopping Fraudulent Robocall Scams: Can More Be Done?*, July 10, 2013, available at [http://www.commerce.senate.gov/public/index.cfm?p=Hearings&ContentRecord\\_id=c1eec086-3512-4182-ae63-d60e68f4a532&ContentType\\_id=14f995b9-dfa5-407a-9d35-56cc7152a7ed&Group\\_id=b06c39af-e033-4cba-9221-de668ca1978a&MonthDisplay=7&YearDisplay=2013](http://www.commerce.senate.gov/public/index.cfm?p=Hearings&ContentRecord_id=c1eec086-3512-4182-ae63-d60e68f4a532&ContentType_id=14f995b9-dfa5-407a-9d35-56cc7152a7ed&Group_id=b06c39af-e033-4cba-9221-de668ca1978a&MonthDisplay=7&YearDisplay=2013).

<sup>13</sup> See, e.g., Central Office Code (NXX) Assignment Guidelines (COCAG), ATIS-0300051 (May 24, 2013) (“COCAG Guidelines”), at § 2.1 (“If a resource is sold, brokered, bartered, or leased for a fee, the resource is subject to reclamation.”); see also COCAG Guidelines, § 2.5 (“The guidelines should provide the greatest latitude in the provision of *telecommunications services* while effectively managing a finite resource.”) (emphasis added).

In addition to guarding against number exhaust, there are traffic integrity benefits, as well. If numbers were disassociated from telecommunications services, non-carriers could use the numbers to route traffic through other switches or in other ways outside of the number-assigned carrier's control. As it is, Bandwidth is increasingly encountering circumstances involving the unauthorized use of its numbers with third-party non-standardized routing arrangements. Because these non-standardized arrangements are fundamentally aimed at avoiding the established regulated intercarrier networks, the primary means by which Bandwidth becomes aware of these situations is when it is notified of consumer harm associated with its telephone numbers, such as spoofing, fraud or call failures.<sup>14</sup>

Thus, provisioning numbers in conjunction with the sale of telecommunications services is critical to both responsible carrier network management and consumer protections and becomes even more necessary in the face of the increasing prevalence of these kinds of unorthodox routing practices. Ironically, the Commission's goals of enhancing consumer protection, traffic integrity, and network reliability in the Rural Call Completion proceeding would actually be undermined if the Commission were to continue to advance its proposals as set forth in this proceeding. Pursuing stated objectives that are directly at odds with one another at the very same time would not seem to be a productive approach. Again, a very simple way to avoid increasing the likelihood of the consumer harm set forth in the Rural Call Completion context is to ensure that carriers can effectively manage the communications traffic that is associated with the telephone numbers their customers rely upon. Further, any other result would be fundamentally discriminatory.

In the end, direct access to number resources for non-carriers is a solution in search of a

---

<sup>14</sup> See Comments of Bandwidth.com at 1-4, WC Dkt. 13-39 (May 13, 2013) ("Bandwidth Rural Call Completion Comments").

problem. To the extent there are legitimate issues, such as improving reporting on “intermediate” number resources, those can be addressed through more direct and significantly less complex solutions. However, problems that individual non-carriers claim to encounter that are fundamentally financial in nature and a result of their own voluntary business decisions to not become carriers should not drive radical change for the entire industry, absent holistic reform of the regulatory structure that will govern all providers going forward.

**B. The Commission Must Avoid Adopting Fundamentally Discriminatory Positions that Favor Non-Carriers and Which Would Have Both Expected and Unintended Adverse Consequences**

Providing non-carriers direct access to number resources should not be the Commission’s first recourse in resolving number resource reporting or allocation issues. By limiting the direct access trials and issuing its detailed NPRM, the Commission has duly recognized that providing direct access to non-carriers is not a targeted or simple solution. The Commission should continue to proceed very cautiously in this regard because there are many potential pitfalls, some easily predictable but others unintended, that will inevitably result from providing non-carriers direct access to number resources. Opposition to this proposal from a wide variety of industry sectors (*e.g.*, COMPTTEL, NTCA, and NCTA), as well as vocal opposition from states and consumer groups, should signal to the Commission that direct access will have adverse consequences for consumers and for competition.

Bandwidth and others have previously provided significant detail in this proceeding on complications from providing direct access to number resources to non-carriers. The most critical stumbling block to the proposal is that concocting a parallel “separate but equal” regulatory regime with a lower level of regulatory requirements for non-carriers is discriminatory for all carriers that, like Bandwidth, have invested in becoming a carrier. The best way to ensure

that there is no preferred or discriminatory treatment for non-carriers is to require them to become carriers to obtain carrier benefits, such as access to numbering resources. If the Commission goes down the road of a separate, parallel regulatory regime, non-carriers should be required to adhere to the same regulatory requirements as carriers, wherever possible. While this is the only reasonable way to avoid discrimination, it is unclear why the Commission would expend the energy to create a parallel regime, if it intends to impose, as it must, carrier-equivalent requirements on non-carriers. Accordingly, Bandwidth would like to draw particular attention here to the potential adverse impacts on competition, Commission enforcement, and routing, which are critical areas where there may be unintended consequences.

Competition. The Commission only briefly requests comment on the impact of permitting non-carriers direct access on competition. The Commission only notes that there may be a rapid migration of services into lesser-regulated non-carrier affiliates, which should indeed be a concern.<sup>15</sup> The Commission should be much more concerned, however, about the impact of giving non-carriers direct access to numbers will have on the regulatory infrastructure established by the Telecom Act. The rights established for competitors pursuant to the Act are established for competitive carriers.<sup>16</sup>

Enforcement: Among other things, the Commission has aptly identified concerns regarding its ability to exercise its forfeiture authority, and requested comment on whether non-carriers obtaining direct access to numbers might be subject to the same penalties and enforcement processes as traditional common carriers.<sup>17</sup> If the Commission were to consider giving non-carriers direct access, it should require that they obtain state and/or federal

---

<sup>15</sup> See NPRM, ¶ 35.

<sup>16</sup> See, e.g., 47 U.S.C. § 252(a).

<sup>17</sup> NPRM, ¶¶ 37-38.

certification to implicate the Commission's forfeiture authority and should require consent to the same penalties. Bandwidth is again concerned, however, that the Commission is trying to implement a parallel regulatory scheme that it is completely unnecessary to resolve the issues at hand.<sup>18</sup>

While the Commission has identified these critical enforcement concerns, it is not clear that the Commission is addressing the full panoply of Commission rules and regulations that apply to carriers today, and how they might apply to non-carriers that obtain direct access to number resources. A further example of this problem that Bandwidth and others have previously raised is the issue of foreign carrier affiliation rules that would be left unclear if the Commission were to attempt to create a separate regulatory system for non-carriers.<sup>19</sup> During the evolution to an all-IP marketplace, the public interest would be better served by the Commission continuing to manage the well understood and effective current system where only carriers obtain direct access to numbers, while it simultaneously aggressively pursues the holistic reform necessary to advance the entire industry toward IP in a nondiscriminatory manner.

Routing: Bandwidth also has significant concerns with the impact of granting direct access to non-carriers on routing. As detailed in the Bandwidth Rural Call Completion comments, there is a connection between the rise of rural call completion problems, and the increasing preponderance of often non-certificated providers using non-standardized routing and

---

<sup>18</sup> The Commission should also be more generally concerned as to whether the Enforcement Bureau is in a position to handle significantly larger volumes of litigation, without the complementary mechanisms of the state commissions.

<sup>19</sup> See 47 C.F.R. § 63.11; *see also* Letter from James C. Falvey, Eckert Seamans, to Marlene H. Dortch, Secretary, Federal Communications Commission, at 3, CC Dkt. 99-200 (July 19, 2012). *See also* Letter from James C. Falvey, Eckert Seamans, to Marlene H. Dortch, Secretary, Federal Communications Commission, at 3, CC Dkt. 99-200 (July 20, 2012).

termination methods.<sup>20</sup> The rural call completion issues identified by the Commission in its recent Rural Call Completion NPRM<sup>21</sup> provide a glimpse into the future if the Commission introduces into the carrier ecosystem a multitude of non-certificated and unqualified providers. Bandwidth, as a wholesale carrier working with a wide variety of non-certificated providers, now routinely sees issues that arise when non-certificated providers fail to engage in industry standard routing practices.

The Commission should avoid the likelihood of more fraud and abuse on consumers and carriers alike by limiting direct access to numbers to certificated carriers. Alternatively, the Commission has asked for comment on whether non-carriers should be required to route through carrier partners. Bandwidth supports a requirement that all non-carriers calls be routed through a carrier partner. Both Vonage and Neutral Tandem emphasize the importance of carrier partners in call routing,<sup>22</sup> and the Commission could limit the adverse routing implications by requiring such carrier partner routing.

**III. IF THE COMMISSION ULTIMATELY DETERMINES THAT IT IS IN THE PUBLIC INTEREST AND LEGALLY SOUND TO PROVIDE NON-CARRIERS WITH DIRECT ACCESS TO NUMBER RESOURCES, IT MUST PROCEED CAUTIOUSLY WITH SUCH FUNDAMENTAL CHANGE**

If, after a thorough review of the record, the Commission determines to continue down the road of providing non-carriers direct access to numbers, it should do so in a manner that protects the competitive framework and does not discriminate against carriers. On the variety of issues where the Commission considers how non-carriers should be regulated, the Commission's default response should be to treat them the same as carriers. Non-carriers should carry a heavy burden to justify any form of preferential treatment over carriers.

---

<sup>20</sup> Bandwidth Rural Call Completion Comments at 1-4.

<sup>21</sup> See *Rural Call Completion NPRM*.

<sup>22</sup> NPRM, ¶¶ 42-43.



The Commission has requested comment on a wide variety of complex regulatory issues, which themselves demonstrate the new layer of regulatory complexity the Commission will need to create if it chooses to move forward with direct access for non-carriers. While urging the Commission not to wade into this morass, Bandwidth provides the following comments on certain issues upon which the Commission has requested comment

#### **A. State and Federal Certification**

Bandwidth and others have noted in the past that carriers are subject to state certification requirements which ensure that carriers have the financial, managerial, and technical capability to operate and sustain telecommunications networks. Before obtaining direct access to numbers, non-carriers should be required to obtain state certification as carriers. The Commission in the NPRM suggests that such an approach may be the best means to ensure the financial, managerial, and technical integrity of new entrant non-carriers: “Should we adopt a similar process whereby the Commission will provide the certification required by section 52.15(g)(2)(i), but only to the extent a state commission lacks authority to do so or represents that it has a policy of not doing so?”<sup>23</sup>

In Bandwidth’s experience, state commissions will provide certification for any financially, managerially, and technically qualified non-carrier that chooses to obtain the regulatory rights and responsibilities of a carrier. To the extent that non-carriers seek direct access to numbers, they should be required to obtain carrier certification from any state commission that provides such certification. In the unlikely event that a state commission refuses carrier certification, the provider would be permitted to seek federal certification upon demonstration of such refusal, in a process similar to the Commission’s Eligible

---

<sup>23</sup> NPRM, ¶ 21.

Telecommunications Carrier process held out as an example by the Commission.<sup>24</sup> The Commission should establish a financial, managerial, and technical capacity standard, mirroring the standard that carriers must meet in order to obtain direct access to number resources.

## **B. Number Utilization and Exhaust Issues**

Bandwidth and other carriers noted in previous comments that introducing hundreds if not thousands of new non-carriers into the marketplace will invariably lead to additional number exhaust. Non-carriers have never effectively explained how allowing direct access in these circumstances will not exacerbate number exhaust. Limiting access to non-pooling rate centers does not address the fundamental problem caused by permitting direct access to a significantly larger pool of providers.<sup>25</sup>

The Commission has requested comment on the most effective means to limit the impact of new LRNs in the event it moves forward with direct access for non-carriers. Requiring state certification to obtain direct access to numbers would mean that non-carriers would be required to follow the same state rules as carriers, and would eliminate the need for special treatment of non-carriers with respect to access to numbers. If the Commission does not require state certification by non-carriers, it should place the burden on non-carriers to obtain state commission approval before allowing direct access to non-pooling rate centers. Requiring that state commissions act to protect non-pooling rate centers, as suggested by the Commission,<sup>26</sup> places an undue burden on state commissions, which for the most part are opposed to providing direct access to non-carriers at this time. Alternatively, the Commission should adopt the approach of the California Commission and permit state commissions to identify which rate

---

<sup>24</sup> See NPRM, ¶ 21, n. 71.

<sup>25</sup> Permitting special treatment for smaller non-carriers to obtain 10,000 codes necessary for additional LRNs would lead to further number exhaust. See NPRM, ¶ 24.

<sup>26</sup> NPRM, ¶ 26.

centers are available to non-carriers at any given time.<sup>27</sup> If an IVP believes that it is disadvantaged by either of these approaches, it could apply for state certification as a carrier in order to obtain precisely the same rights as carriers.

### **C. VoIP Interconnection**

As discussed above, the Commission should require that all traffic associated with telephone numbers be routed in a manner that the underlying carrier approves or directly manages. Requiring carrier authorization ensures that traffic is routed effectively and efficiently, with appropriate carrier-to-carrier arrangements established to protect call quality. If it does so, there is less likely to be degradation of service, fraud, and abuse that can result from creative non-carrier routing of the kind that has caused the Commission to issue the Rural Call Completion NPRM and call completion enforcement penalties. Non-standardized approaches to non-carrier routing may also be the source of the recent spate of spoofing that is frustrating consumers, as well as those federal and state legislators and regulators tasked with protecting consumers.

Before permitting non-carriers direct access to number resources, the Commission should, as recommended by NARUC,<sup>28</sup> complete its Further Notice of Proposed Rulemaking in the Connect America Fund proceeding to determine how VoIP Interconnection will be regulated for carriers and non-carriers alike. Permitting non-carriers direct access without clear rules would be at cross purposes with the Commission's efforts to improve call completion rates and would lead to widespread misrouting and call completion issues. Again, direct access to numbers for non-carriers is not a panacea for the industry's problems. When you throw the cards up in the air, they generally do not land in a well-organized stack. Permitting non-carriers wide

---

<sup>27</sup> See NPRM, ¶ 27.

<sup>28</sup> See NARUC Resolution.

latitude or preferential treatment under the Commission's rules will only serve to multiply the industry's and the Commission's already daunting regulatory challenges.

#### **D. Facilities Readiness**

The Commission adopted particular facilities readiness requirements (47 C.F.R. 52.15(g)(2)(ii)) for SBCIS (now AT&T) in its waiver order in order to ensure that AT&T—the dominant local exchange carrier in 22 states—did not discriminate by cutting sweetheart deals with its IVP affiliate.<sup>29</sup> The Commission's requirements were intended “to address the concerns raised by Vonage regarding the potential for SBCIS to obtain discriminatory access to the network of its incumbent LEC affiliate.”<sup>30</sup> Direct access to non-affiliated non-carriers presents the same opportunity for ILECs to discriminate by cutting special deals for some non-carriers, while refusing to negotiate or playing hardball with others. The Commission required SBCIS to meet the facilities readiness requirement through publicly filed interconnection agreements or tariffed interconnection arrangements.<sup>31</sup> The Commission imposed this same requirement on the trial participants in the recently established direct access trials.<sup>32</sup> In order to prevent ILECs from engaging in discriminatory tactics, the Commission should retain the requirement that non-carriers meet the facilities readiness requirement through publicly filed agreements or tariffed arrangements.

#### **E. Intercarrier Compensation**

Bandwidth and others have raised concerns that non-carriers obtaining direct access to number resources will attempt to evade the intercarrier compensation obligations that would

---

<sup>29</sup> *Administration of the North American Numbering Plan, Order*, 20 FCC Rcd. 2957, ¶ 10 (2005) (“SBCIS Waiver Order”).

<sup>30</sup> *Id.*

<sup>31</sup> *Id.*

<sup>32</sup> NPRM, ¶ 105.

otherwise apply if the numbers were assigned to carriers.<sup>33</sup> Whether reciprocal compensation or tariffed switched access services, intercarrier compensation is typically invoiced based on the number associated with the originating carrier in call detail records. The Commission should ensure that non-carriers are subject to the same intercarrier compensation payment obligations as carriers. The courts have yet to rule on the legality of the Commission's elimination of intercarrier compensation and, in any event, the Commission has recognized the importance of a gradual transition if bill and keep for intrastate traffic somehow proves to be legal.<sup>34</sup>

If the Commission does not require (as it should) that non-carriers obtain state certification as carriers, it should require that they submit to the jurisdiction of the state commissions for any matter where that state commission would have jurisdiction over a certificated carrier, including the payment (or nonpayment) of intrastate access charges. Non-carriers should be required to pay tariffed access charges as if they were carriers, as well as tariffed reciprocal compensation charges in states such as California where tariffed reciprocal compensation is permitted. In addition, the Commission should require that non-carriers pay state-approved reciprocal compensation rates on Section 251(b)(5) traffic to ensure that they do not evade payment obligations. Because a provider can effectively delay the execution of a traffic exchange agreement for years, this obligation should begin on the date that a carrier first receives Section 251(b)(5) traffic from a non-carrier. Intercarrier compensation in a multi-provider chain is a complex topic, one of many the Commission should avoid by not permitting non-carriers direct access to number resources.

---

<sup>33</sup> Letter from James C. Falvey, Eckert Seamans, to Marlene H. Dortch, Secretary, Federal Communications Commission, at 1-2, CC Dkt. 99-200 (June 6, 2012).

<sup>34</sup> See *Connect America Fund*, ¶ 798.

## **F. Number Portability**

If the Commission requires that calls be routed through carrier partners, as recommended above, the porting requirement can remain with the carrier partner, and there is no need to revise the Commission's rules, which Bandwidth submits are limited to circumstances where a non-carrier is partnered with a carrier.<sup>35</sup> The Act's number portability obligations apply only when switching from one telecommunications carrier to another and to users of "telecommunications services." It is not clear to Bandwidth how the Commission has the legal authority to require a carrier to port numbers to a non-carrier, particularly without first declaring that the services in question are "telecommunications services." The Commission could avoid this issue by requiring that non-carriers partner with a carrier and route all traffic through that carrier such that all porting can be accomplished between two carriers.

## **IV. IF THE COMMISSION PERMITS NON-CARRIERS DIRECT ACCESS TO NUMBERS, IT SHOULD PROVIDE A MEANINGFUL TRANSITION**

Because direct access to numbers for non-carriers will significantly complicate the regulatory landscape, it should not be at the forefront of the Commission's agenda. As noted, the Commission should first address the issue of VoIP interconnection and establish clear rules before adding this additional layer of complexity.

If the Commission proceeds toward a structure that allows non-carriers to obtain number resources directly, a reasonable transition period, similar to the time frame of the ICC transition, is required.<sup>36</sup> The Commission should first complete the ongoing trials and then take stock of the operational successes and failures, which must include a meaningful time period for comment.

---

<sup>35</sup> See Letter from James C. Falvey, Eckert Seamans, to Marlene H. Dortch, Secretary, Federal Communications Commission, at 1-3, CC Dkt. 99-200 (Sept. 7, 2012), which is incorporated herein by reference.

<sup>36</sup> The Commission has requested comment on what would be a meaningful transition to direct access. See NPRM, ¶ 65.

The Commission should then provide for an integration period for carriers to prepare for the initiation of direct access, including necessary product revisions, product development, and associated systems revisions. During this phase, the Commission should permit interested carriers to become certificated. The Commission should provide an annual cycle during which additional carriers are eligible to obtain all necessary state and federal certifications.

Further, it is reasonable to allow the industry to adjust to a new regulatory paradigm by ensuring a gradual transition that is operationally managed according to Commission established volume and time limits. Finally, the Commission should conduct an annual review of any issues associated with the transition, if any, to direct access and be prepared to make any regulatory changes necessary to resolve identifiable problems.

## **V. CONCLUSION**

Providing non-carriers direct access to numbers is not a panacea for the challenges facing the industry and the Commission. In fact, attempts at piecemeal resolution of individual provider's business model concerns without the benefit of holistic reform that establishes clear rules of the road across the industry will almost certainly create more problems than it will solve. Thus, the Commission should focus the industry's collective resources on the critical components of how to rapidly and effectively transition the telecommunications regulatory framework into an all-IP marketplace. Nevertheless, should the Commission continue

with its piecemeal approach, it must proceed cautiously and in a manner that closely tracks the multi-year transition of the regulatory structure for an IP market that is occurring concurrently.

Respectfully Submitted,

/s/ James C. Falvey

James C. Falvey, Esq.

Justin L. Faulb, Esq.

Eckert Seamans Cherin & Mellott, LLC

1717 Pennsylvania Avenue, N.W.

12<sup>th</sup> Floor

Washington, D.C. 20006

(202) 659-6655

jfalvey@eckertseamans.com

jfaulb@eckertseamans.com

*Counsel for Bandwidth.com, Inc.*

Greg Rogers, Esq.

Deputy General Counsel

Bandwidth.com, Inc.

900 Main Campus Drive

Raleigh, NC 27606

(919) 439-5399

grogers@bandwidth.com

June 19, 2013